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10/517,233	12/29/2004	Matthias Gajewski	262-04	4458
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PAUL AND PAUL 2000 MARKET STREET SUITE 2900 PHILADELPHIA, PA 19103			EXAMINER GRAY, LINDA LAMEY	
			ART UNIT 1734	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE			MAIL DATE	
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Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/517,233

Applicant(s)

GAJEWSKI ET AL.

Examiner

Linda L. Gray

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12-7-04, 12-29-04, 4-21-05, 9-16-05.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 December 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Detailed Action

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. **Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

Claims 1-10, use of reference numbers in parenthesis, in all the claims renders the claims, indefinite because it is unclear which limitations(s) is (are) required. Specifically, for example, claim 1 refers to a clamping means then recites "(5, 21, 27)." Use of a clamping means invokes 35 U.S.C. 112, 6th paragraph where "(5, 21, 27)" appears to remove the claim from 35 U.S.C. 112, 6th paragraph, because such refers to specific items in the specification having a specific structure.

Claim 1, the phrase "in particular" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d). Also, see **claim 4** and "preferably in the form of a wide-slot nozzle." Also, see **claim 10** and the preferably-phrases.

Claim 3, use of "the material web (34)" indicates only one web where claim 1 requires two. It is unclear if such refers to a new web or one of the webs in claim 1.

Claim 6 is indefinite in that it is unclear if the bars are part of the clamping means in claim 1, as indicated in the specification.

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Claim 7, use of "roof-like" is indefinite in that it is unclear what is included within the scope of the claim.

Claims 10 is indefinite in indicating that the rail is parallel to itself (L 2-3: ". . . the traverse rail (2) of . . . relationship with transverse rail (28) . . .)"

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 6, and 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burgo et al. (US 3,556,912) in view of Benzing et al. (US 5,746,101).

Claim 1, Burgo teaches an apparatus capable of gluing webs 35 and 37 where the apparatus includes clamping means 43 and 45 capable of clamping webs 35 and 37. The apparatus also includes a welding unit capable of applying heat and pressure for gluing webs 35 and 37 along an adhesive strip where the welding unit includes slider 46 displaceable along transverse rail 47 substantially transversely with respect to webs 35 and 37 and on which are arranged heating means 11 and therebehind in the direction of displacements pressure rollers 17 and 19 (c 2-4). Figure 3 demonstrates that webs 35 and 37 overlap and have straight edges.

Claim 1, Burgo does not teach that the apparatus includes a cutting unit capable of applying an inclined cut extending substantially transversely with respect to webs 35 and 37.

Benzing teaches splicing two edges together where there is provided a cutting unit capable of applying an inclined cut extending substantially transversely with respect to a longitudinal. The edges are inclined for an improved adhesion during splicing.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have provided in Burgo that the apparatus includes a cutting unit capable of applying an inclined cut extending substantially transversely with respect to webs 35 and 37, where webs 35 and 37 will have inclined cut edges at the point of overlap, because Benzing teaches that such provides an improved adhesion during splicing.

The limitation in claim 1 of the direction of travel of the webs (L 6-7) refers to the intended use of the apparatus claimed and does not structurally distinguish the claimed apparatus from that of Burgo. The limitation of the webs being packaging material for the production of liquid tight packs, in particular for liquid foods, wherein each web is covered at least at one side with liquid-tight adhesive layer which can be activated by heat refers to the material operated upon by the claimed apparatus and does not structurally distinguish the claimed apparatus from that of Burgo.

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Claim 6, means 43 and 45, which are under rail 47, are bar shaped and thereunder is provided bar-shaped structures 41 and 39 in cooperation with means 43 and 45.

Claim 9, means 43 and 45 have front, central, and rear regions for clamping.

Claim 10, rail 47, and clamping bars 43/45/41/39 extend in parallel relationship with rail 47 itself. The clamping bars are in beam-form. Note that the angle relationship claimed is written in alternative form and is not specifically required. However, angled clampers are conventional.

5. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Burgo et al. in view of Benzing et al. as applied to claims 1, 6, and 9-10 above, and further in view of Jahn et al. (US 2002/0088525).

Claim 7, Burgo teaches that the pressure in the production of the adhesive strip is produced by rollers 17 and 19. Burge teaches pressure member 21 in opposite relationship therewith with member 21 being in the form of a bar that extends in parallel relationship with rail 47.

Claim 7, Burge does not teach that **(a)** member 21 has an inclined surface or **(b)** member 21 is rubber.

For **(a)**, Jahn teaches a welder including ultrasonic member 14 with anvil member 22 thereunder having an inclined surface.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have provided in Burgo that member 21 has an inclined surface

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because Jahn teaches that anvils in an ultrasonic sealing apparatus conventionally have different shapes as disclosed in the reference where it is obvious to replace one general anvil shape (that of Burge) with another art recognized alternative anvil shape (that of Jahn).

For **(b)**, anvils of rubber are a conventional material for an anvil in the sealing art and it would have been obvious to a person of ordinary skill in the art at the time the invention was made to have provided in Burgo that member 21 is rubber because it is obvious to replace one general anvil material (that of Burge) with another art recognized alternative anvil material (that of Jahn).

6. Claims 1, 5-6, and 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Williams et al. (US 3,687,786) in view of Benzing et al. (US 5,746,101) and Burgo et al (US 3,556,912).

Claim 1, Williams teaches an apparatus capable of gluing webs W1 and W2 where the apparatus includes clamping means 19 and 21 capable of clamping webs 35 and 37. The apparatus also includes a welding unit capable of applying heat and pressure for gluing webs W1 and W2 along an adhesive strip where the welding unit includes slider C displaceable along transverse rail 11/13 substantially transversely with respect to webs W1 and W2 and on which are arranged heating means 33 (c 2-4). Figure 4 demonstrates that webs W1 and W2 overlap and have straight edges.

Claim 1, Williams does not teach **(a)** that the apparatus includes a cutting unit capable of applying an inclined cut extending substantially transversely with respect to webs W1 and W2 **(b)** a pressure roller behind means 33 on slider C.

For **(a)**, Benzing teaches splicing two edges together where there is provided a cutting unit capable of applying an inclined cut extending substantially transversely with respect to a longitudinal. The edges are inclined for an improved adhesion during splicing.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have provided in Williams that the apparatus includes a cutting unit capable of applying an inclined cut extending substantially transversely with respect to webs W1 and W2, where webs W1 and W2 will have inclined cut edges at the point of overlap, because Benzing teaches that such provides an improved adhesion during splicing.

For **(b)** and in view of Burgo discussed above, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to have provided in Williams that the apparatus includes a pressure roller behind means 33 on slider C because Burgo teaches in the same art that pressure rollers used in combination with an ultrasonic welder help provide pressure to the seal to secure the seal.

The limitation in claim 1 of the direction of travel of the webs (L 6-7) refers to the intended use of the apparatus claimed and does not structurally distinguish the claimed apparatus from that of Williams. The limitation of the webs being packaging

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material for the production of liquid tight packs, in particular for liquid foods, wherein each web is covered at least at one side with liquid-tight adhesive layer which can be activated by heat refers to the material operated upon by the claimed apparatus and does not structurally distinguish the claimed apparatus from that of Williams.

Claim 5, Williams teaches that means 33, which is part of the welding unit, is capable of being raised and lowered in a lifting direction substantially perpendicularly to webs W1 and W2 and perpendicularly to slider C. Williams teaches the same for rail 11/13 (c 3, L 11-45).

Claim 6, means 19 and 21, which are under rail 11/13 (see Fig 1 showing means 19 and 21 at an elevation under rail 11/14), are bar shaped and thereunder is provided bar-shaped structures T in cooperation with means 19 and 21.

Claim 9, means 19 and 21 have front, central, and rear regions for clamping.

Claim 10, rail 11/13, and the clamping bars extend in parallel relationship with rail 11 itself. The clamping bars are in beam-form. Note that the angle relationship claimed in written in alternative form and is not specifically required. However, angled clampers are conventional.

7. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Williams et al. in view of Benzing et al. and Burgo et al. as applied to claims 1, 5-6, and 9-10 above, and further in view of Jahn et al. (US 2002/0088525).

Claim 7, Williams in view of Burgo teaches that the pressure in the production of the adhesive strip is produced by the pressure rollers. Williams teaches pressure

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member T in opposite relationship therewith with member T being in the form of a bar that extends in parallel relationship with rail 11/13.

Claim 7, Williams does not teach that **(a)** member T has an inclined surface or **(b)** member T is rubber.

For **(a)**, Jahn teaches a welder including ultrasonic member 14 with anvil member 22 thereunder having an inclined surface.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have provided in Williams that member T has an inclined surface at some point because Jahn teaches that anvils in an ultrasonic sealing apparatus conventionally have different shapes as disclosed in the reference where it is obvious to replace one general anvil shape (that of Williams) with another art recognized alternative anvil shape (that of Jahn). Note that claim 7 does not indicate where the inclination is to occur or that the pressure rollers press against the inclination as in claim 8.

For **(b)**, anvils of rubber are a conventional material for an anvil in the sealing art and it would have been obvious to a person of ordinary skill in the art at the time the invention was made to have provided in Williams that member T is rubber because it is obvious to replace one general anvil material (that of Williams) with another art recognized alternative anvil material (that of Jahn).

Allowable Subject Matter

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8. Claims 2, 3, 4, and 8 would be allowable if rewritten to overcome the rejections under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

9. The following is a statement of reasons for the indication of allowable subject matter:

claim 2: it would not have been obvious to a person of ordinary skill in the art at the time the invention was made to have provided in Burgo or Williams placement of the cutter of Benzing on the carriage on the side opposite the pressure roller(s) with respect to the heating means because although it is conventional to have cutting blades on splicing carriages (see Garrett et al. (US 2,606,136) and Pursell et al. (US 3,957,567) for example), the cutter of Benzing would not operate with the apparatus of Burgo or Williams in the claimed manner of being on the slider and the cutters of Garrett et al. and Pursell et al. do not provide an inclined cut as claimed;

claim 3: Burgo and Williams do not teach, arranged on the slider and beside the pressure roller(s) a guide element capable of lifting one or the web along its transverse edge during displacement of the slider in that the webs are intended to remain in the flat stable position during operation of the apparatus of Burgo and Williams;

claim 4: Burgo and Williams do not teach that the heating means is a means having a hot air element, a transfer tube, and a hot air nozzle in that the heating means is intentionally an ultrasonic element used in combination with other items in the apparatus as an improvement over prior ultrasonic splicing apparatuses; hot air splicers are known in the splicing art as demonstrated by Pinto et al. (US 4,681,646); however, it would not have been obvious to a person of ordinary skill in the art at the time the invention was made to have substituted the heating elements with such since the heating elements are intentionally ultrasonic elements used in combination with other items in the apparatus as an improvement over prior ultrasonic splicing apparatuses; and

claim 8: Burge in view of Jahn and Williams in view of Burgo and Jahn do not teach that the contact line of the pressure roller(s) is against the anvil member on its inclined surface; Sager (US 3,657,033) teaches an anvil having an inclined surface where an ultrasonic horn contacts the surface for bonding areas of a web together. The inclined surface is provided such that increased shearing forces are produced to cut the webs quickly which decreases wear on the horn when the horn has the shape shown in Figures 4A to 4D. The apparatuses of Williams and Burgo are not intended to

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cut the webs during sealing; it would not have been obvious to a person ordinary skill in the art at the time the invention was made to have provided in either that the pressure roller(s) contact the inclined surface because Sager teaches providing an inclined surface for the purpose of increasing shearing forces where Burgo and Williams do not intend to shear.

10. As allowable subject matter has been indicated, applicant's reply must either comply with all formal requirements or specifically traverse each requirement not complied with. See 37 CFR 1.111(b) and MPEP § 707.07(a).

Note also with respect to claim 5 and Burgo that Burgo teaches that means 11, which is part of the welding unit, is capable of being raised and lowered in a lifting direction substantially perpendicularly to webs 35 and 37 and perpendicularly to slider 46; however, Burgo does not teach the same for rail 47 that rail 47 is a stationary for the purpose of providing support to the overall apparatus.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Linda Gray whose telephone number is (571) 272-1228. The examiner can normally be reached Monday-Friday from 9:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Fiorilla, can be reached at (571) 272-1187. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public Pair. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-1997 (toll-free).

llg

December 14, 2006

LINDA GRAY
PRIMARY EXAMINER

Linda A Gray